DOCUMENT RESUME

ED 087 861 CE 000 945

AUTHOR	Hammond, Robert R.; And Others
TITLE	An Evaluation of the Effects of a Planned Career Education Program for Grades 7, 8, 9, and 10 in a Rural Area.
INSTITUTION	Maine State Dept. of Educational and Cultural Services, Augusta. Vocational Education Research Coordinating Unit.; School Administrative District 37, Harrington, Maine.
REPORT NO	RD-Ser-C-71-2
PUB DATE	May 73
NOTE	65p.
EDRS PRICE	MF-$0.75 HC-$3.15
DESCRIPTORS	*Career Education; *Educational Programs; *Intermediate Grades; Program Content; Program Effectiveness; Program Evaluation; Rural Areas; *Rural Education; Rural Youth; *Secondary Grades
IDENTIFIERS	*Maine

ABSTRACT

The purpose of a planned career education program was to provide rural students in grades seven through ten a variety of experiences and knowledges which would form a basis for future educational and occupational choices. The program explores occupational models in the home, family, and local community; occupational choices available in the State and region; attitudes, interests, and ability levels of the student; and occupations that require further education and training. Students at the grade levels mentioned in Maine School Administrative District #37 comprised the study's sample population. They were asked to complete the Occupational Knowledge Test and a Personal Data Sheet. Results were tabulated for the questions: (1) Is the student able to identify several occupations and their importance to his career plans? (2) Is he able to define several occupations and describe the nature of the work involved? (3) Does he know the qualifications for several occupations and can he list the training needed for entrance? (4) Is the student able to relate occupational knowledge to the study of an occupation in an objective style? (5) Do sex differences influence student occupational knowledge? and (6) Is intelligence a factor in limiting or increasing occupational knowledge? (AG)

ED 087861

RESEARCH AND DEVELOPMENT
SERIES NO. C/71-2

PLANNED CAREER EDUCATION IN A RURAL AREA

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State Department of Educational
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Augusta, Maine 04330

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Research and Development Series
C/71-2

AN EVALUATION OF THE EFFECTS OF A PLANNED CAREER EDUCATION PROGRAM FOR GRADES 7, 8, 9, and 10 IN A RURAL AREA

by

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FOREWORD

This report summarizes the essential findings of a study supported by the Research Coordinating Unit, Bureau of Vocational Education and conducted in S.A.D. #37, Harrington, Maine during 1971-72. The project was initially funded in June, 1971 and concluded in June, 1972.

The present report provides a general overview of the entire research effort from beginning to end, with conclusions and significant findings. Any success in bringing this project to a successful close is due to the enthusiasm generated by the director and various staff members of S.A.D. #37. Robert Hammond organized and directed the on-site activities. In essence all career development activities in the school, such as testing, use of career education materials, field trips, were the responsibility of the on-site director. Data analysis and compilation of the final report was conducted by Professors Drummond and Ryan.

It was exciting and professionally rewarding to participate in this joint venture with the staff of S.A.D. #37. A sincere word of thanks is due to all professional staff, citizens, and parents of S.A.D. #37 who supported the project.

May, 1973

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INTRODUCTION

The problem of helping rural boys and girls become acquainted with career options is of paramount importance in our society. On the one hand, today's youth have more opportunities available to them than any other group in the history of our society; on the other hand, they are more isolated from either direct involvement or observation of work than any comparable group in the past. Most of the vital work of our society is isolated from today's youth and they are restricted in either observing or actively participating in work. Most youth have not had opportunity to work or to observe the vast number of jobs that exist. Many adults have participated in family structures where certain work tasks were assigned to us but technology now restricts the opportunity for youth to engage in home - family related work tasks. The nature of our suburbs today does not permit many meaningful work options. It is this recognition, that work experiences were a valuable part of our education, that has caused the school to examine its role in this endeavor. Not only are there more career opportunities available today, but a technical-vocational education is required to enter many of the complex jobs that exist.

Another paradox in our society is the fact that work is often viewed as undesirable or meaningless. A feeling exists that in order to avoid work one attends college. There is a need to help students view all work as a positive endeavor. This does not deny that occupational rankings or differing status rankings will not continue to exist. A program of career development should assist students in

broadening rather than narrowing the choices which are considered acceptable. It should become the basis for creating within the school a climate that promotes a positive attitude toward all work and education. Career development should result in the school staff viewing its goals in terms of their appropriateness for the individual rather than in terms of their appropriateness to society.

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NEED FOR THE STUDY

In the past, we have attempted to communicate to youth about the world of work through printed materials, which were too often prepared for a labor economist, rather than to communicate to students about the world of work. How many youth can read about the job of a machinist as it is written in the Occupational Outlook Handbook and from this develop an insight into the smell, the sound, the pride that comes from making a product? We suspect that very few students can do this.

In order for most youth to relate themselves to different work roles, to test out their expectations of self-characteristics in particular work roles, and to differentiate future decisions and alternatives, they must be introduced to activities and approaches that go beyond the traditional approaches of printed materials, audio-visual aids, etc. Through the use of simulated or direct work experiences such as those contemplated it is believed that the student will "experience" what it means to perform a particular work role. From this base of experience it will be much easier for the student to assess his own feelings and values about performing a particular work role. The simulated or direct work experiences can be performed either within the school or outside the school, and they may also be provided at times other than during the school hours. Every attempt will be made to insure that the experience is relevant.

The approach that has been described to you offers several advantages. First, the occupational groupings as described will remain constant even though occupations within this grouping

may change. This should assist students to formulate the concept that there are many occupations from which they may obtain similar satisfactions. Second, the approach suggested provides an opportunity for students to learn about themselves and the world of work through active involvement. It is believed that "learning by doing" offers a more reasonable way for most students to understand their assets and liabilities and the performance of work tasks provides greater satisfaction. Third, the approach suggested provides an integrated structure around which the individual can learn about himself in relation to the different dimensions of career development. In the past, educational efforts in an occupations course involved using the first six weeks to study about self; the next six-weeks' period to study about educational opportunities; and the third six-week period to study about the world of work. As though each of these were separate entities within themselves. The approach that we have suggested provides a means through which these students can acquire this understanding in an integrated approach rather than one of segmentation.

Fourth, the approach suggested should provide the student with the tools and understanding about himself that should establish a desire to continue to seek to learn. The course is not supposed to be the end upon which a final decision is made, but is designed to provide the student with a frame of reference in which he can think about himself in relationship with the world of work so that he can continue to seek out his own direction. Fifth, the program should provide intensive motivation that will spread to other school subjects.

Every student has a desire to look at himself in terms of the future, and to consider the options and alternatives available, and the decisions that he will have to make. As he learns about these, he should perceive the relationship that exists between present school subject matter and the acquisition of knowledge and understanding necessary for a future job. The proposed program can be one step in a continuous program of career development that provides the motivational thread around which the rest of the educational program can be made meaningful to the student.

STATEMENT OF THE PROBLEM

The purpose of a planned career education program was to provide grades seven, eight, nine and ten a variety of experiences and knowledges that would serve to formulate the basis for more appropriate educational and occupational choices at critical decision points. The program was designed for all students regardless of their expected level of educational attainment. A series of planned career development activities focused on a broad spectrum of educational and occupational career opportunities. It must be stressed that the intent of this program was not to force the student to commit himself to an educational and occupational choice, but rather to acquire the basis upon which future "vocational and educational decisions" could be made.

More specifically, the purposes of the program can be summarized through the following four components:

1. To explore occupational models in the home, family and local community. Exploration of those occupational models

in the home, family and local community will strive to provide youth the opportunity to view those occupations and to study in some depth those which have a direct bearing on the life he is living at the present time.

2. To explore occupational choices available in the state, region and in particular New England. Exploration of those occupational choices available in the state and New England would seek to broaden the understanding of various occupations in greater detail and would include a chance for the student to become aware of the opportunities and potential satisfactions of different work roles and to understand the occupational structure.

3. To begin self-exploration of aptitudes, interests, and ability levels. Self-exploration experiences provided students would include those designed to assist in evaluating interests, abilities, values, needs and other self characteristics as they relate to occupational roles. Also, students would be assisted in recognizing the range of occupations that exist which would enable them to express themselves and live the type of life they desire.

4. To explore occupations that require further education and training. The goal will be to assist students to identify the intent and nature of different educational avenues available as well as the point to which each educational avenue can lead. In addition, efforts will be made to assist students to recognize the relationship between school subjects and the skills necessary for performing a job. The activities of this component will focus, not only upon understanding the nature of the decision-making process, and on recognizing the future decisions to be made, but also on the resources available for assistance in this process.

The proposed program for grades seven, eight, nine and ten, will be a broad exploratory program to provide the foundation for assisting the student in clarifying different options available through the public school system and where these might lead. Such a program can serve to maximize the use each individual makes of the existing school resources in moving himself toward his employment goal. Furthermore, the program should aid the student in narrowing his list of alternatives.

A vehicle for enabling students to obtain a comprehensive view of the world of work is the major focus of this project.

A career development system should provide the establishment of developmental programs for career education. This program represents only a small but essential part of a continuous process. The proposed program without the other elements will only serve to confuse and further alienate some students from school. The system as conceived provides an educational structure that moves the students from the general to the specific thus benefiting the actual career development patterns of most students. This approach provides a means for establishing a system of education built around the motivational trend of movement toward an eventual work objective. In many respects this represents the same type of motivational trends which we have long provided the college-bound student.

The program is three dimensional in that guidance is essential to each student and there must be an interlocking of vocational and general education to permit students to learn academic skills through the art of doing. This project seeks to provide students with an opportunity to try themselves out in either a simulated or direct work experience in each of the six occupational groupings.

SOURCES OF DATA AND PROCEDURES

The Sample

The seventh, eighth, ninth, and tenth grade students from S.A.D. #37 comprised the sample population for this study. This involved the district high school and four elementary schools. M.S.A.D. #37 is located in western Washington County. The district

serves six small rural communities that are relatively isolated. Career opportunities in the area served by the SAD #37 are primarily seasonal and limited in number. Major industries or factories are located about sixty miles away in Bangor, Maine.

The population of this region was 29,859 according to the 1970 Census. In the six towns served by SAD #37 the average annual wage was $7,045 for a family of four. Rural poverty is not unknown to this region and all members of family seek work to contribute their share of needed dollars. Unemployment was estimated at 11.5 per cent for 1971 and reflects a continued need for new industry. The rural isolation of this region further compounds the problem of locating an entry level career.

TABLE 1

Population By Town

Town	1970
Addison	773
Columbia	162
Columbia Falls	367
Cherryfield	777
Harrington	553
Milbridge	1154

School population for the 1972-73 academic year was 1012 in grades K-12. When compared with other communities in the area SAD #37 is relatively wealthy in terms of school facilities and the opportunity for seasonal work.

The SAD #37 has a pupil-teacher ratio of 21 to 1. The school employs a full-time school counselor for grades 9-12, and has adequate instructional coverage in basic academic areas. In the area of

vocational education there is need for expanded offerings in several areas, e.g., marine technology, automotives, and electronics. The per pupil cost was $551.00 in 1970-71 and is below the state average of $884 per secondary pupil in 1970-71.

The specific questions to be answered in this study were:

1) Is the student able to identify several occupations and their importance to his career plans?

2) Is the student able to define several occupations and describe the nature of the work involved?

3) Does the student know the qualifications for several occupations and can he list the training needed for entrance?

4) Is the student able to relate occupational knowledge to the study of an occupation in an objective style?

5) Do sex differences influence student occupational knowledge?

6) Is intelligence a factor in limiting or increasing occupational knowledge?

Data for study was gathered by utilization of two major instruments. The first of these instruments, Occupational Knowledge Test (Form A and B) was developed by the Comprehensive Evaluation Project (1969). The OKT was designed to assess the student's knowledge of occupations and his occupational-educational expectations. A Personal Data Sheet was developed from the survey instrument used by James S. Coleman in the Equality of Educational Opportunity research project (1966). In addition, Lorge-Thorndike intelligence test scores were available for the subjects.

The data collection plan of the study was the exposure of the 7th, 8th, 9th, and 10th graders to a planned series of career information activities and experiences. In 1971-72 the following activities were provided on a systematic basis:

1. Exposure to career models.

2. Field trips to business - industry (about one per week).

3. Parental involvement as tour leaders.

4. Media programs - films, film strips, posters, television career films.

5. Career information materials, e.g., career games, career briefs, career comic books, career newsletter, and traditional occupational materials.

6. Group discussions - the school counselor, teachers, and project director planned these sessions.

7. Use of self analysis materials, i.e., "Let's Explore Your Career" and "Think Ahead."

The data analysis is limited to the 7th, 8th, and 10th grades. It was not necessary to include the data analysis for the 9th graders in this report.

RESULTS

The first specific question to be answered by this study was, "Are students able to identify several occupations and their importance to their career plans?"

Several questions of this nature were included on the evaluation form given to both the seventh grade and eighth grade groups. The response distribution to the item: I have become acquainted with major fields of work and have developed a serious interest in one or more career areas is presented in Table II. Seventy-six percent of the seventh graders and eighty-one percent of the eighth graders reported they did.

TABLE II

I HAVE BECOME ACQUAINTED WITH THE MAJOR FIELDS OF WORK AND HAVE DEVELOPED A SERIOUS INTEREST IN ONE OR MORE CAREER AREAS

Grade	Sex	Yes N	No N	N	%
7	B	27	9		
	G	42	11		
	Total	69	20	89	76
8	B	29	7		
	G	27	6		
	Total	56	13	69	81
Total		125	33	158	79

The response distribution to the item: I have had an opportunity to explore career possibilities in which I am interested, to make some comparisons, and to reach some decisions regarding my own career is listed in Table III.

Fifty-nine percent of seventh graders and sixty-three percent of eighth graders stated they did.

TABLE III

I HAVE HAD AN OPPORTUNITY TO EXPLORE CAREER POSSIBILITIES IN WHICH I AM INTERESTED, TO MAKE SOME COMPARISONS AND TO REACH SOME DECISIONS REGARDING MY OWN CAREER

Grade	Sex	Yes	No		%
7	B	21	16		
	G	32	21		
	B&G	53	37	90	59
8	B	25	11		
	G	19	15		
	B&G	44	26	70	63
Total		97	63	160	61

A second important question to be answered by the study was, "Does such a program increase a student's knowledge of occupations?"

The Occupational Knowledge Test was administered to both seventh and tenth graders. Form A, level 1, was administered to the seventh graders in September, 1971 and Form B, level 1, was administered in May, 1972. Form A, level 2, was administered to the tenth graders in September, 1971 and Form B, level 2, in May, 1972. The comparison of the pre- and post-test means on the Occupational Knowledge Test of seventh graders from the participating schools is presented in Table IV. Paired "t" tests were computed between pre- and post-means for each school by sex, the combined group of boys and girls and by district. The post-test mean in every case was higher than the pre-test mean. The differences were significant either at the .05 level or .01 level at every school except for the Cherryfield school. However, when all schools were combined, the differences were significant for boys, girls and the combined sexes at the .01 level.

The seventh grade boys scored higher than girls in all schools except at Harrington. The boys at Columbia Falls school had the highest post-test mean score, i.e., scored the highest scores on the Occupational Knowledge Test.

TABLE IV

COMPARISON OF PRE- & POST-TEST MEANS OF SEVENTH GRADERS ON THE OCCUPATIONAL KNOWLEDGE TEST

	N	Pre $\bar{X}$	SD	Post $\bar{X}$	SD	t
All Schools Combined						
Boys	33	27.58	4.79	30.85	4.09	4.318**
Girls	42	26.88	4.75	29.52	4.13	4.730**
Boys & Girls	75	27.19	4.75	30.11	4.14	6.411**
Milbridge						
Boys	9	27.33	4.30	30.11	2.89	2.519*
Girls	11	23.64	4.65	27.18	4.33	4.088**
Cherryfield						
Boys	6	28.83	4.71	31.00	3.79	.66 NS
Girls	11	28.82	3.46	30.18	3.19	1.12 NS
Harrington						
Boys	13	26.23	5.59	29.85	4.18	4.32**
Girls	15	27.53	4.79	30.27	4.73	3.03**
Columbia Falls						
Boys	5	30.00	3.08	34.60	4.93	4.93**
Girls	5	27.80	4.97	31.00	1.87	1.49 NS

*Sig. at .05 level
**Sig. at .01 level

The results of the analysis of the Occupational Knowledge Test given the tenth graders is presented in Table V. The mean scores for boys was lower at the end of the year than their pre-test mean. Girls made a higher mean score at the end of the year than at the beginning but the difference was non-significant. Girls tended to score slightly higher than boys on the test.

TABLE V

COMPARISON OF PRE- AND POST-TEST MEANS OF 10TH GRADERS ON THE OCCUPATIONAL KNOWLEDGE TEST

		Pre		Post		
	N	$\bar{X}$	SD	$\bar{X}$	SD	
Boys	32	20.75	4.50	19.59	5.80	-1.312 NS
Girls	36	20.72	5.23	21.00	4.73	.371 NS
Total	68	20.74	4.86	20.34	5.26	- .689 NS

A third question was concerned with the relationship of intelligence and occupational knowledge. The correlations between IQ and the pre- and post- Occupational Knowledge Test scores for the seventh grade group is presented in Table VI. The mean intelligence scores for the seventh grade is presented in Table VII. The mean intelligence scores for both boys and girls were 100, or average. The standard deviations would indicate that the spread of scores was somewhat similar to the norming group. All the correlations between intelligence and both the pre- and post- Occupational Knowledge Test were significant. Five were significant beyond the .001 level

indicating that there was a better than chance relationship between intelligence and Occupational Knowledge Test scores. The correlation for boys on the post-test was significant at the .05 level. The reported correlations indicated there was a moderate relationship between intelligence and occupational knowledge. The relationships were much higher for girls than boys.

TABLE VI

CORRELATIONS BETWEEN IQ AND PRE- AND POST- OCCUPATIONAL KNOWLEDGE TEST FOR SEVENTH GRADE GROUP

		COMPARISONS		
Group	N	Pre test $\overline{X}$ Post	Pre $\overline{X}$ IQ	Post $\overline{X}$ IQ
Boys	33	.528**	.584***	.353*
Girls	42	.676***	.666***	.623***
Total	75	.613***	.624***	.488***

* Sig. at .05 level
** Sig. at .01 level
*** Sig. at .001 level

TABLE VII

MEAN INTELLIGENCE SCORES FOR SEVENTH GRADE

	N	$\overline{X}$	SD
Boys	33	100.48	13.33
Girls	42	100.90	11.95
Total	75	100.72	12.49

The Correlations between IQ and pre- and post- Occupational Knowledge Tests for tenth graders are presented in Table VIII. The mean intelligence quotients for tenth graders are presented in Table IX. The mean IQ scores for both boys and girls were 104. The correlations between IQ and the Pre- and Post- Occupational Knowledge Tests were all significant, for boys at the .01 level, for both groups at the .001 level. The reported correlations indicated there was a moderate relationship between intelligence and occupational knowledge. The correlations between IQ and post-test scores were lower than with pre-test scores. Girls had a higher correlation on the pre-test than boys but on the post-test the opposite was true.

TABLE VIII

CORRELATIONS BETWEEN IQ AND PRE- AND POST- OCCUPATIONAL KNOWLEDGE TEST FOR TENTH GRADERS

		COMPARISONS		
Group	N	Pre $\bar{X}$ Post Occ. Know.	Pre vs. IQ	Post vs. IQ
Boys	22	.585**	.591**	.549**
Girls	31	.527***	.621***	.462**
Total	53	.546***	.605***	.504***

**Sig. at .01
***Sig. at .001

TABLE IX

MEAN INTELLIGENCE SCORES FOR 10TH GRADE GROUP

	N	$\bar{X}$	SD
Boys	22	104.45	14.43
Girls	31	103.71	12.05
Total	53	104.02	12.96

The question of whether there were sex differences that influenced the student's occupational knowledge was a fourth area to be investigated. The first type of comparison of the high school programs of tenth grade boys and girls showed sex differences. The comparison is presented in Table X. More boys than girls were enrolled in the Industrial Arts (45% of boys in October to 11% of girls). No boys but 39% of girls were enrolled in the Commercial or Business curriculum. A greater percentage of boys were enrolled in the College Preparatory program (43% in October to 35% of girls) but the percentages were fairly close.

TABLE X

HIGH SCHOOL PROGRAM OR CURRICULUM IN WHICH ENROLLED

Curriculum	Tenth Grade Boys		Tenth Grade Girls	
	Oct.%	June %	Oct. %	June %
General	11.9	8.8	6.5	13.9
College Preparatory	42.8	50.0	34.7	41.9
Commercial or Business	0.0	0.0	39.1	34.9
Vocational	0.0	0.0	8.6	4.6
Agricultural	0.0	0.0	0.0	0.0
Industrial Arts	45.2	41.2	10.8	2.3
Other	0.0	0.0	10.8	2.3

The mean of the seventh grade boys on the pre-test Occupational Knowledge Test was compared with the mean of the seventh grade girls. A "t" of .63 was computed which was not significant at the .05 level. The post-tests were also compared and a "t" of 1.457 computed which was not significant at the .05 level. There were no sex differences for the seventh grade group. In comparing the tenth grade boys and girls, a "t" of .02 was computed on the pre-test and 1.090 on the post-test. Both ratios were not significant at the .05 level.

To test whether there were sex differences in occupational knowledge, analysis of covariance was computed for both the seventh and tenth grades. The pre Occupational Knowledge Test was used as the covariate. The results are presented in Tables XI through XIV. No significant differences were found between the sexes at either the seventh or tenth grade level on the Occupational Knowledge Test.

TABLE XI

ANALYSIS OF COVARIANCE OF OCCUPATIONAL KNOWLEDGE TEST BY SEX OF SEVENTH GRADERS WITH PRE OCCUPATIONAL KNOWLEDGE TEST AS COVARIATE

Source of Variation	Sum of Sq.	df	MS	F
Between	16.88	1	16.88	1.57
Within	773.60	72	10.74	

TABLE XII

PRE-AND POST-TEST AND ADJUSTED POST-TEST MEANS FOR SEVENTH GRADERS ON THE OCCUPATIONAL KNOWLEDGE TEST

	Pre	Post	Adjusted Post
Boys	27.58	30.85	30.64
Girls	26.88	29.52	29.68

TABLE XIII

ANALYSIS OF COVARIANCE OF OCCUPATIONAL KNOWLEDGE TEST BY SEX OF TENTH GRADERS WITH THE PRE-OCCUPATIONAL KNOWLEDGE TEST AS COVARIATE

Source of Variation	Sum of Squares	df	MS	F
Between	46.21	1	46.21	2.45
Within	1133.19	60	18.87	

TABLE XIV

PRE-AND POST-TEST AND ADJUSTED POST-TEST MEANS FOR TENTH GRADERS ON THE OCCUPATIONAL KNOWLEDGE TEST

	Pre	Post	Adjusted Post
Boys	20.75	19.59	19.70
Girls	20.72	21.00	21.41

A fifth question studied was: "Does student know the qualifications for several occupations and can he list the preparations necessary for entrance into same?"

Eighty-seven percent of the seventh graders and eighty-six percent of the eighth graders recognized they needed further training or education, but only forty-one percent of the seventh graders and forty-seven percent of the eighth graders reported that they knew where to find the training. Only twenty-eight percent of the eighth graders and twenty-five percent of the seventh graders reported they had an opportunity to discuss with a counselor or teacher their interests, abilities, weaknesses or strengths in relation to their career choice. Seventy-one percent of the eighth graders and sixty-one percent of the seventh graders felt that their school experience had made an important contribution toward their future career choice. Sixty-nine percent of the seventh graders as compared to forty-nine percent of the eighth graders felt that their school provided adequate assistance concerning possible career choices. Sixty-one percent of the eighth grade boys compared to fifty percent of eighth grade girls stated that they had the opportunity to visit with people who were actively engaged in the career fields in which they were interested. Only forty-four percent of the seventh graders reported they had the opportunity to visit with these people.

In looking at the results of the pre- and post-data sheet for the tenth graders, five questions related to the research question. The responses of whether the boys and girls ever read a college catalog is found in Table XV. Although many of the students were considering college, at the beginning of the year only about a fifth

of the boys had read a college catalog as compared to about a third of the girls. About ten percent more of both groups had read a college catalog during the school year.

TABLE XV

STUDENTS HAVING READ A COLLEGE CATALOG

Response	Tenth Grade Boys		Tenth Grade Girls	
	Oct. %	June %	Oct. %	June %
Yes	21.4	29.4	36.9	47.6
No	78.5	70.6	63.0	52.4

The distribution of responses by sex to the item whether the students were planning further education after high school is listed in Table XVI. In October a greater percentage of girls than boys reported "Definitely Yes" (41% to 28%). Both groups showed a gain in this category. In June 41% of the boys and 48% of the girls stated "Definitely Yes." The shift of responses for boys was primarily from the "Probably Yes" category and for girls from the "Definitely No" category.

TABLE XVI

FURTHER EDUCATION--PLANS AFTER HIGH SCHOOL

Response	Tenth Grade Boys		Tenth Grade Girls	
	Oct. %	June %	Oct. %	June %
Definitely yes	28.2	41.2	40.9	47.6
Probably yes	46.1	20.6	34.0	30.9
Probably no	15.3	26.5	11.3	16.7
Definitely no	10.2	11.8	13.6	4.7

Although most tenth graders would like to participate in a work study program (see Table XVII), an even greater percentage, over 90%, of both boys and girls, were in favor of such a program in June.

TABLE XVII

STUDENTS WHO WOULD LIKE TO BE INVOLVED IN A WORK STUDY PROGRAM IN WHICH THE SCHOOL AND LOCAL EMPLOYERS COOPERATE TO GIVE STUDENTS ON-THE-JOB TRAINING

Response	Tenth Grade Boys		Tenth Grade Girls	
	Oct. %	June %	Oct. %	June %
Yes	78.5	90.9	85.7	93.1
No	21.4	9.1	14.2	6.9

When asked whether they would be interested in enrolling in a vocational program, slightly over half of the boys were interested in both October and June (see Table XVIII). A greater percentage of girls than boys, 65% to 55%, reported "yes" in October. While the percentage of "yes" by boys declined from October to June, the percentage of "yes" for girls increased from 65% to 71%.

TABLE XVIII

STUDENTS INTERESTED IN A VOCATIONAL PROGRAM IF OFFERED IN HIGH SCHOOL

Response	Tenth Grade Boys		Tenth Grade Girls	
	Oct. %	June %	Oct. %	June %
Already enrolled	9.5	11.8	13.0	4.7
Yes	54.7	52.9	65.2	71.4
No	35.7	35.3	21.7	23.8

The group was also asked when they finished their education, what sort of job did they think they would have. The results are presented in Table XIX for the tenth grade group. It is interesting to note that there were sex differences in the goals of boys and girls. Girls reported they wanted jobs in clerical and service areas and sales areas--areas in which no boys reported interests. In October for boys, the highest categories reported were "Professional," "Don't Know" followed by "Semi-skilled worker" or "Foreman." Basically the order did not change in June, although a greater percentage of the male sample, a third, reported they did not know. Roughly a third of the girls also reported this category in June, up sixteen percent from October. The order preferred for girls was "Professional," "Service Worker," followed by "Clerical Worker."

TABLE XIX

WHEN YOU FINISH YOUR EDUCATION, WHAT SORT OF JOB DO YOU THINK YOU WILL HAVE?

Job Category	Tenth Grade Boys Oct. %	Tenth Grade Boys June %	Tenth Grade Girls Oct. %	Tenth Grade Girls June %
Technical	9.7	3.0	4.6	5.0
Official	4.8	0.0	0.0	0.0
Manager	0.0	0.0	0.0	0.0
Proprieter or owner	0.0	3.0	6.9	5.0
Semi-skilled Worker	4.8	3.0	2.3	0.0
Clerical Worker	0.0	0.0	11.6	7.5
Service Worker	0.0	3.0	16.2	17.5
Protective Worker	14.6	6.1	0.0	0.0
Salesman	0.0	3.0	0.0	2.5
Farmer or Ranch Manager	0.0	0.0	4.6	2.5
Farm Worker	0.0	0.0	0.0	0.0
Workman or laborer	9.7	3.0	0.0	0.0
Professional	19.5	24.2	34.8	27.5
Skilled Worker or Foreman	17.0	18.2	0.0	2.5
Don't Know	19.5	33.3	18.6	35.0

A sixth question identified to be answered was whether this program helped the students develop more interest and awareness in career fields, have knowledge of job requirements and current trends in the field, and show career maturity.

In comparing the response patterns of the seventh graders as compared to the eighth graders significant differences in the response patterns were found on four items on the evaluation questionnaire. A chi square of 5.249, significant at the .05 level, was found when comparing the seventh graders with the eighth graders on the item dealing with having considered their abilities so that they could present themselves favorably when applying for a job. Eighty percent of the eighth graders as compared with 62% of the seventh graders reported they had considered their abilities so that they could present themselves favorably when applying for a job.

There was a significant chi square (5.947, .05 level) found on the item school provides adequate assistance in helping with career choice. Only 49% of the eighth graders as compared to sixty-nine percent of the seventh graders said that they had adequate assistance.

A chi square of 8.188 significant at the .01 level was found between the response patterns of seventh and eighth graders on the item: Is having a job more important than any other personal goal? Thirty percent of the seventh graders as compared to fifty-four percent of the eighth graders stated yes.

The fourth item to show a response difference between seventh and eighth graders dealt with the contribution of schools to the students' career choice. Seventy-one percent of the eighth graders as compared with 64% of the seventh graders felt it did.

The data for the item: Do you want training for the job you really want to work at when you finish high school? is presented in Table XX. About the same percentage of boys reported "yes" in both October and June (65% to 64%). A greater percentage of girls than boys stated "yes" in October (75%) and this percentage increased to 90% by June.

TABLE XX

STUDENTS WANTING TRAINING FOR THE JOB
THEY REALLY WANT WHEN THEY FINISH HIGH SCHOOL

Response	Tenth Grade Boys Oct. %	Tenth Grade Boys June %	Tenth Grade Girls Oct. %	Tenth Grade Girls June %
Yes	65.3	63.6	75.0	89.7
Not Able to Qualify for it	0.0	4.6	0.0	3.5
No, Course is Full	0.0	0.0	3.5	0.0
No, Will Not Try to Take it	3.8	0.0	3.5	3.5
No Training for Job in This School	30.7	31.8	17.8	3.5

The comparison between the responses of the tenth grade boys and girls to the question: How far do you want to go in school? is presented in Table XXI. The distribution of responses of the boys to the six categories did not markedly change from October to June. About 29% reported they wanted to finish high school, 27% technical school, and 21% graduate from college. With the girls there were several shifts in response categories from October to June. Forty-three percent in June as compared to 30% in October reported they wanted to complete technical school. An additional six percent said they wanted to graduate from college (13% to 19%).

TABLE XXI

EDUCATIONAL GOALS OF STUDENTS

Level	Tenth Grade Boys		Tenth Grade Girls	
	Oct. %	June %	Oct. %	June %
Not Finish High School	7.1	11.8	6.5	2.4
Complete High School	26.1	29.4	19.5	19.1
Technical School	28.5	26.5	30.4	42.9
Some College	9.5	8.8	19.5	9.5
Graduate from College	21.4	20.6	13.0	19.1
Do Professional or Graduate Work	7.1	2.9	10.8	7.1

One attitude statement asked the students was: Even with education will you have a hard time to get a job? The responses to this item are presented in Table XXII. There is no major change in how boys reacted to this question. More girls reported "Agree" in June than they did in October (36% to 26%).

TABLE XXII

EVEN WITH EDUCATION I WILL HAVE A HARD TIME TO GET A JOB

Responses	Tenth Grade Boys		Tenth Grade Girls	
	Oct. %	June %	Oct. %	June %
Agree	30.9	26.5	26.0	35.7
Not Sure	36.5	35.3	36.9	33.3
Disagree	34.1	38.3	36.9	30.9

Another attitude item relating to the research question reported in this section was: People like me don't have much chance to be successful. The response patterns for boys and girls are presented in Table XXIII. A greater percentage of both boys and girls disagreed at the end of the year (57% in Oct. to 68% in June for boys; 73% in Oct. to 86% in June for girls).

TABLE XXIII

PEOPLE LIKE ME DON'T HAVE MUCH OF A CHANCE TO BE SUCCESSFUL

Response	Tenth Grade Boys		Tenth Grade Girls	
	Oct. %	June %	Oct. %	June %
Agree	19.0	8.8	13.3	7.1
Not Sure	23.8	23.5	13.3	7.1
Disagree	57.1	67.7	73.3	85.7

A third attitude item relating to this area was: People who accept their conditions in life are happier than those who try to change things. (See Table XXIV). No significant response shift is found between the October and June testing for either boys or girls. More girls, about one half, "disagree" to only one third of the boys.

TABLE XXIV

PEOPLE WHO ACCEPT THEIR CONDITION IN LIFE ARE HAPPIER THAN THOSE WHO TRY TO CHANGE THINGS

Response	Tenth Grade Boys		Tenth Grade Girls	
	Oct. %	June %	Oct. %	June %
Agree	33.3	38.2	34.7	30.9
Not Sure	30.9	26.5	17.3	19.1
Disagree	35.7	35.3	47.8	50.0

Both groups were asked how bright they viewed themselves. The results are presented in Table XXV. There was a dramatic shift from October to June for the girls. Seventy-six percent of the girls reported they were "among the brightest" in October, while only 14% did in June. The response shift was to "average," 6% in October to 57% in June.

More boys in June saw themselves as "among the brightest" than in October, 18% as compared to 7%, less saw themselves as average, 61% in October to 47% in June.

TABLE XXV

HOW BRIGHT DO YOU THINK YOU ARE IN COMPARISON WITH OTHER STUDENTS IN YOUR GRADE

	Tenth Grade Boys		Tenth Grade Girls	
	Oct. %	June %	Oct. %	June %
Among the Brightest	6.9	17.7	76.0	14.3
About Average	25.5	26.5	13.0	16.7
Average	60.4	47.1	6.5	57.1
Below Average	4.6	5.9	4.3	4.7
Among the Lowest	2.3	2.9	0.0	2.4

They were asked how they would feel if they had to quit school. The results are reported in Table XXVI. In October 27% of the boys reported they would not care one way or the other, while only 9% reported this in June. Only about twelve percent of the girls reported they would be "very happy" or "don't care." The shift for girls was to "disappointed" and "do anything to stay in school."

TABLE XXVI

IF SOMETHING HAPPENED AND YOU HAD TO QUIT SCHOOL NOW, HOW WOULD YOU FEEL?

	Tenth Grade Boys		Tenth Grade Girls	
	Oct. %	June %	Oct. %	June %
Very Happy	4.5	11.8	6.5	7.1
Don't Care One Way or Other	27.2	8.8	6.5	4.7
Disappointed	20.4	26.5	10.8	16.7
Try to Continue	27.2	29.4	50.0	35.7
Do Anything to Stay in School	20.4	11.8	26.0	35.7

The last two tables in this section, XXVII and XXVIII, relate to how much education their fathers and mothers want them to have. It is interesting to note that no father or mother was reported to have wanted their children to have less than a high school education. With both sexes there are shifts from October to June. In three of the four cases, the "Don't Know" categories increased. In general, most parents are reported to want their children to have more than just a high school education.

TABLE XXVII

HOW MUCH EDUCATION DOES YOUR FATHER WANT YOU TO HAVE?

Level of Education	Tenth Grade Boys		Tenth Grade Girls	
	Oct. %	June %	Oct. %	June %
Less than High School	0.0	0.0	0.0	0.0
High School	23.0	22.9	18.1	5.0
Technical, Nursing, Business	25.6	31.4	25.0	17.5
Some College	7.6	5.7	11.3	10.0
Graduate from College	23.0	20.0	25.0	25.0
Professional or Graduate School	2.5	2.9	6.8	5.0
Father not Home	2.5	5.7	2.2	12.5
Don't Know	15.3	11.4	11.3	30.0

TABLE XXVIII

HOW MUCH EDUCATION DOES YOUR MOTHER WANT YOU TO HAVE?

Level of Education	Tenth Grade Boys Oct. %	Tenth Grade Boys June %	Tenth Grade Girls Oct. %	Tenth Grade Girls June %
Less than High School	0.0	0.0	0.0	0.0
High School	25.0	26.6	22.2	7.3
Technical, Nursing, Business	25.0	29.4	33.3	21.9
Some College	12.5	8.8	8.8	14.6
Graduate from College	30.0	23.5	22.2	26.8
Professional or Graduate School	2.5	5.9	6.6	7.3
Mother not home	0.0	0.0	0.0	2.4
Don't Know	5.0	11.8	6.6	19.5

DISCUSSION

The over-riding objective of the Career Education Project (CEP) was to ferret out data useful to teachers, parents, and guidance personnel to aid youth with the process of career development. It was important that a systematic procedure be developed to provide youth with an intensive and sequential program of career education. The research questions posed for this study were directed to ascertaining the effects of a planned program of career education on the occupational knowledge of students in grades 7, 8, 9, and 10. Therefore, in the discussion which follows the data will be reported to illuminate our findings.

In essence, the research project focused on those tactics necessary to install a broadly based career education program in a rural setting. A vital lesson was gleaned from the data of this study in regards to innovating or changing the traditional way of doing things. A nondirective approach does not seem to produce the results essential to success. The project director and consultants generally attempted to maintain a low profile and serve as resource personnel. A visible and active project will require the continual public support of the School Committee and Administrative Staff. The tendency was for the local board to be highly involved in the beginning and gradually fade from view. Administrative staff did not provide the continued leadership and in some cases the faculty did not view the CEP as having high priority. To facilitate the review of data each question on page 8 will be restated and related data presented.

Question 1: Is the student able to identify several occupations and their importance to career plans?

The data reported on the evaluation form by 7th and 8th graders indicated that more than 70 percent developed a knowledge of several fields of work. It is significant that pupils in the Harrington Elementary School had significant increases on the Occupational Knowledge Test. Community participation in the form of volunteers in the classroom, field trips, and the use of local businesses for cooperative education experiences was higher than the other three towns. In fact, Harrington and Cherryfield conducted the greatest number of career exploration field trips. For those educators who argue for more activities out in the community, this evidence may be of support to their arguments. In the 7th and 8th grades, a total of 32 trips were conducted. A total of 36 were arranged for 9th and 10th graders, or about one per week.

Question 2: Is the student able to define several occupations and describe the nature of the work involved?

To facilitate the development of these particular skills a variety of activities, materials and experiences were provided students in grades 7, 8, 9, and 10. A career resource laboratory was centered at the local high school and supervised by the project director. Films, filmstrips, simulation games, career briefs, and career "comic books" were available for student and teacher use. "Let's Explore Your Career," a publication of the Cooperative Extension Service, University of Maine, Orono, is representative of the career material provided. The Career Resource Specialist attempted to provide the faculty with two hours per day of planning advice. In retrospect, two hours was inadequate. The question indicates that only 28% of the

8th graders and 25% of the 7th graders had an opportunity to discuss with a counselor or teacher their interests, abilities, or aptitudes in relation to their career choice.

Question 3: Does the student know the qualifications for several occupations and can he list the training needed for entrance?

The results indicate that 87% of the 7th graders and 86% of the 8th graders could identify the qualifications needed for entry into various careers. However, only 41% of the 7th graders and 47% of the 8th graders reported that they knew how to find the training. Scores on the Occupational Knowledge Test for 7th and 10th graders suggest that a planned program of career education can increase occupational knowledge scores (see Tables II and III). For example, in the 10th grade the school counselor was responsible for planning 16 group guidance sessions. The focus of these sessions was to present information on job opportunities, educational training, institutions, manpower trends, and related information. It was assumed that student decision making would be improved as a result of these sessions. Several of the topics were: (1) Where Am I Going?; (2) Career Opportunities in Maine; and (3) Understanding My Interests. A field trip per week was an additional variable in expanding the horizons of these 10th graders. The publicizing of student career activities probably generated community interest and feedback. In several specific cases the field trips were written up in the newsletter published by the Citizens Advisory Committee. The involvement of parents, citizens, and resource models as field trip leaders, classroom speakers and career consultants undoubtedly exerted

an influence on the career aspirations of these students. A precise measurement of this influence was not possible.

Question 4: Is the student able to relate occupational knowledge to the study of an occupation in an objective style?

An analysis of the data indicates no significant differences for the seventh and tenth graders on sex as related to occupational knowledge. The career education program did not clearly address the issue of occupational study as a variable in either increasing or decreasing occupational knowledge. It is not clear as to exactly what style students utilize in examining the world of work. Intelligence may be a factor that influences the number of variables a student can process in the study of an occupation. It is important to note that 61% of the eighth grade boys viewed visits with resource people as important in understanding career fields of interest to them. Overall, more than 50% of the total study group was planning further education after high school. In summary, the students in this study wanted more exposure to work experience programs, career information, and exposure to resource persons to help them in delimiting career plans.

Question 5: Do sex differences influence student occupational knowledge?

Interpretation of OKT data for 7th and 10th grade boys and girls indicates that all groups had significant score increases when combined. In Columbia Falls the 7th grade girls did not show a significant increase in the post-test OKT scores. According to the project staff the least productive effort was registered by the staff of this school. Columbia Falls is located on the eastern side of S.A.D. 37 and is relatively isolated from the mainstream of innovation.

The 7th grade boys had a significant increase between pre- and post-testing at the .01 level. A possible factor was the intensive interest of two members of the Citizens Advisory Committee and their tutoring of the 10 students (see Table II). The girls in this school may be subject to more traditional occupational stereotyping and not be encouraged to consider careers other than housewife, secretary, etc. It is possible that they are not encouraged to consider career alternatives of any breadth or depth. The teacher in this particular school may have unconsciously biased the career education program in favor of boys.

For both boys and girls in 7th grade at the Cherryfield School the results on OKT were nonsignificant. Parent participation in this town was rated excellent by the project director and was reflected in willingness of parents to lead field trips. It may not be sufficient if the professional school staff does not indicate a commitment by leadership and classroom activity. The isolation of Cherryfield from easy access to career resource materials and the project director was another variable that influenced the programs. Teachers need supports services on a daily basis if they are to implement a career education program. In regard to in-service staff training the Cherryfield faculty did not have a high degree of involvement and were receiving materials without adequate guidelines for their use.

Question 6: Is intelligence a factor in limiting or increasing student occupational knowledge?

The relationship of intelligence to career decision making is at best a multiple issue. Research by previous investigators indicates that "brighter" children make more realistic decisions and possess

greater knowledge of career options. Data analysis in this research effort leads us to conclude that intelligence is significantly related to occupational knowledge. All the correlations between intelligence and the pre- and post-test means for the Occupational Knowledge Test were significant at the .001 level. In essence, brighter students can assimilate and grasp the intricacies of occupational information quickly. In planning a program of career education some provision must be made for review to permit those students of lesser ability a chance to assimilate the information. Different learning styles may be another variable that requires our best efforts to provide multiple learning experiences for all students. Brighter students learn more and retain more of what they are exposed to. Career education specialists must develop materials and curriculum units that provide for the variety of abilities within the traditional classroom.

IMPLICATIONS AND RECOMMENDATIONS

The concept of career education is relatively new to the educational scene and will need continual infusion by professional educators if it is to survive. As we see it, the concept must be supported by the professional educational establishment of this country. It has the potential for making the school experience more meaningful and relevant. At this stage, nobody knows exactly how to implement the concept of career education. As schools continue to work on the problem they must avoid the trap of confusing vocational education as career education. Career education must be developed as an integral part of the school curriculum and at the same time it must have substantial identity to stand alone. In one respect it is the curriculum, but it also is independent in that career education units may be developed by counselors, parents, students, and administrators.

With respect to changes observed from pre- to post-test in student score gains, the following interpretive remarks are appropriate. The combined scores for 7th and 10th grades indicate significant gains in occupational knowledge after exposure to a planned program of career education. In general, the following activities were presented at regular intervals to the students in these two classes:

1. Career oriented field trips
2. Career games
3. Career development materials
4. Career resource people
5. Career oriented films, filmstrips and slides
6. Career oriented guidance and counseling

In our opinion, this concerted effort by teachers, counselors, parents, and other community representatives created a positive interest in career exploration by the students. The evidence indicates that a systematic effort to provide career education involves a team effort. Several schools in the study did not provide in-service training for the staff and this may have reduced the amount for those students.

Teachers will need to consider sex typing as a militating variable in career development. Females in this study demonstrated a knowledge of occupations that was equal to or superior to that possessed by the males. Have we provided females with the fullest possible range of career counseling? The evidence suggests that females in this study aspire to traditional and stereotyped entry level careers for women. Their knowledge of a variety of careers, ranging from professional to semi-skilled is more than adequate, and reflects an awareness of varied career opportunities. A cultural bias may be limiting their real career goals and resulting in a culturally acceptable decision. A majority of the students at each grade level indicated that the career education activities will influence their plans.

REFERENCES

Coleman, J. S., Equality of Educational Opportunity. Washington, D.C.: U.S. Office of Education, 1966.

Heath, R. W., Comprehensive Evaluation Project. Stanford, Calif., 1969. U.S.O.E. Contract #EC-0-9-099017-4424(010).

APPENDICES

Appendix A

CAREER ORIENTATION PROJECT

S. A. D. #37 Confidential

PERSONAL DATA SHEET

Name_____ Age_____
Last first Middle

Birthdate_____ Place_____
Month Day Year City State

Years in this community_____ Years in this state_____

Father's name_____ Fathers age_____

Father's place of birth_____

Schooling completed - 8 or less 9 10 11 12 Business College Some College Vocational School Col. Degree
(circle the appropriate item)

Mother's name_____ Mother's age_____

Mother's place of birth_____

Schooling completed - 8 or less 9 10 11 12 Business College Some College Vocational School College Degree
(circle the appropriate item)

Father's occupation_____

Mother's occupation_____

How many brothers do you have that are older than you_____

How many younger_____

How many sisters do you have that are older than you_____

How many younger_____

Do you, or would you, like to travel_____ in how many states have you traveled_____ Have you been in foreign countries_____

If so, which ones_____ When_____

Do you like school better or less than when you were in the lower grades_____ What do you enjoy doing most_____

Least_____

1. What kind of work do you plan to do for a living?	
2. What is your second choice?	
3. What do your folks want you to be:	
4. What subject(s) do you like best?	
5. What subject(s) do you least?	

Indicate by checking the appropriate column

	YES	NO	I DON'T KNOW
6. Do you plan to complete high school?			
7. Do you plan to take vocational training in high school?			
8. Do you plan further training after high school?			
9. Do you plan to go to technical school after high school?			
10. Do your folks want you to go to school beyond high school?			
11. Do you think your folks can assist you financially?			

Appendix B

November 25, 1971

Dear Parent,

During the past few years, changes in the way we live and the way we earn our living have caused vocational education to become a major focal point in the total process of public education. It is now recognized that the increasing requirements for occupational competence must serve as a major determinant in the structure and functions of public education.

The changing technological environment has placed new demands on the educational system and has led to a new awareness of the interdependency of work and education. It has become increasingly evident that the uneducated person and educated person who have not acquired saleable skills will find few opportunities in a society which places equal value on knowledgeable citizenship and occupational competence.

Despite these changes there is little provision for students, prior to the time of actual career choice, to learn about the entire spectorum of occupations from which they may select their own career. Rural high schools, particularly, because of their size and financial factors, have little that is relevant in terms of career planning for the non-college bound student.

School Administrative District #37 has been the recipient of a federal grant which attempts to provide occupational information for youngsters for grades 7 through 10. The project has a number of goals with which we would like to acquaint you, especially since your child may frequently come to you for advice or information that you have gained through your own living and working experience.

The project seeks to provide an opportunity for students to learn about themselves and the world of work through active involvement. It is believed that learning by doing offers a more reasonable way for most students to understand the advantages and disadvantages of of an occupation; also, the performance of a task provides them with greater satisfaction.

We will attempt to involve students in individual research. Field trips will be made to local industries and guest speakers will be invited to class in order to make the experiences as realistic and practical as possible. Perhaps you as a parent will be able to assist the project in some way. Certainly, your practical experience will assist your child in preparing him for a future occupational assignment.

If you have any questions, or suggestions, please feel free to contact the school at any time for more information about this project.

Yours very truly,

Robert R. Hammond
Project Director

Appendix C

Narraguagus High School
February 17, 1972

Dear_____,

The Citizen's Advisory Committee on Career Education of M.S.AD. #37, Harrington, Maine, feels that the surrounding communities contain a wealth of untapped resources that could serve to enrich the educational program of our schools.

The committee has been at work since December preparing a file of people who volunteer their services occasionally during the school year to visit classrooms and share their knowledge and information with children and teachers.

We are discovering people who enrich children's background in the study of other countries, or other sections of our own country, by sharing their travel experiences, perhaps with movies, slides, and artifacts to accompany their talks; people who can help children better understand our past, our present, and our future; people with occupations which might be of interest to the children and be related to units being studied; people with hobbies or talents they would be willing to share.

The committee is planning to enlist the aide of the Teachers' Association in helping to find some resource volunteers. We feel this is a worthwhile program and we were wondering if you would like to be a participant. If so, would you please fill out the accompanying form.

If you have any questions, please feel free to write or call:

Mr. Elliott Noyes
Narraguagus High School
Harrington, Maine 04643
Telephone 483-2747

Mr. Robert Hammond
Narraguagus High School
Harrington, Maine 04643
Telephone 483-2747

Sincerely,

Robert R. Hammond
Secretary, Citizen's Advisory Comm.

Appendix D

COMMUNITY RESOURCE VOLUNTEER

QUESTIONNAIRE

Name_____

Address_____

Telephone_____

1. Can you help enrich childrens' background in the study of other countries, or other sections of our own country, by sharing your experiences? If so, what countries, or sections of the U.S.A.?

2. Do you have movies, slides, souvenirs from the places you visited?

3. Have you something to contribute that will help children appreciate the life of the past and contributions that pioneers, Indians, and other ethnic groups have made to our present day culture? If so, please explain.

4. Are there any phases of your occupation that you could share with children? If so, what is your occupation?(i.e. dentist, carpenter, artist, mason, etc.)

5. Have you a hobby or talent to share?

   Singing_____ Weaving_____ Spinning_____

   Folk dancing_____ Story telling_____ Poetry _____

   Puppetry_____ Playing an instrument_____

   Collections: e.g., science speciments (rocks, minerals, fossils, butterflies, etc._____

6. If you elected to volunteer for this program, what grade area would you prefer? Please check one.

   K-3____ 4-6 ____ 7-12____ All _____

7. If you know of others who have not received this questionnaire, and might be interested and have something to contribute, please list their names, addresses, phone numbers, and contributions.

_____ _____

_____ _____

_____ _____

Appendix E

CAREER ORIENTATION PROJECT

S. A. D. #37

Confidential

PERSONAL DATA SHEET*

Name_____ Date_____

Please circle the letter of the appropriate answer.

1. Are you: (A) Male (B) Female

2. How old were you on your last birthday?

(A) 12 (B) 13 (C) 14 (D) 15 (E) 16 (F) 17

3. Where have you spent most of your life:

(A) In this city, town or county
(B) In this state but outside this city, town, or county
(C) In another state in the U. S.
(D) In another country outside the U. S.

4. In what type of community have you spent most of your life: (Give your best estimate if you are not sure.)

(A) In the open country or in a farming community
(B) In a small town (less than 10,000 people) that was not a suburb
(C) Inside a medium size city (10,000 to 100,00 people)
(D) In a suburb of a medium size city
(E) Inside a city of more than 100,000 people
(F) In a suburb of a large city

5. How many people live in your home, including yourself, parents, brothers, sister, relatives, and others who live with you?

(A) 2 (B) 3 (C) 4 (D) 5 (E) 6 (F) 7 (G) 8 (H) 9 or more

6. How many of your <u>older</u> brothers and sisters left high school before finishing?

(A) Have no older brothers or sisters
(B) None
(C) 1
(D) 2
(E) 3
(F) 4
(G) 5 or more

GO ON TO NEXT PAGE

*Adapted from <u>Equality of Educational Opportunity</u>, by James S. Coleman, et al, U. S. Office of Education Publications, 1966.

7. What wrok does the head of the household do? You probably will not find his exact job listed, but circle the one that comes closest. If he or she is now out of work, or if retired, mark the one that they usually do. Mark their main job only, if they work on more than one.

(A) Technical - such as draftsman, surveyor, medical or dental technician, etc.
(B) Official - such as manifacturer, officer in a large company, banker, government official or inspector, etc.
(C) Manager - such as sales manager, store manager, office manager, factory supervisor, etc.
(D) Semi-skilled worker - such as factory machine operator, bus or cab driver, meat cutter, etc.
(E) Clerical worker - such as bankteller, bookkeeper, sales clerk office clerk, mail carrier, messenger, etc.
(F) Service worker - such as barber, waiter, etc.
(G) Protective worker - such as policeman, detective, sheriff, fireman, etc.
(H) Salesman - such as real estate or insurance
(I) Farm or ranch manager or owner
(J) Farm worker on one or more than one farm
(K) Workman or laborer - such as factory or mine worker, fisherman, filling station attendant, longshoreman, etc.
(L) Professional - such as accountant, artist, clergyman, dentist, doctor, engineer, lawyer, librarian, scientist, college professor, social worker, etc.
(M) Skilled worker or workman - such as baker, carpenter, electrician, tailor, forman in a factory or mine, enlisted man in the armed forces, mechanic, plumber, plasterer, etc.
(N) Don't know

8. How far in school did your father go?

(A) None, or some grade school
(B) Completed grade school
(C) Some high school, but did not graduate
(D) Graduated from high school
(E) Technical or business school after high school
(F) Some college but less than 4 years
(G) Graduated from a 4 year college
(H) Attended graduate of professional school
(I) Don't know

9. How far in school did your mother go?

(A) None, or some grade school
(B) Completed grade school
(C) Some high school, but did not graduate
(D) Graduated from high school
(E) Technical, nursing, or business school after high school
(F) Some college but less than 4 years
(G) Graduated from a 4 year college
(H) Attended graduate or professional school
(I) Don't know

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10. In what type of community did your father live when he was about your age? (Give your best estimate if you are not sure)

(A) In the open country or in a farming community
(B) In a small town (less than 10,000 people) that was not a suburb
(C) Inside a medium size city (10,000 to 100,000 people)
(D) In a suburb of a medium size city
(E) Inside a large city (100,000 or more people)
(F) In a suburb of a large city
(G) Don't know

11. In what type of community did your mother live when she was about your age? (Give best estimate if you are not sure.)

(A) In the open country or in farming community
(B) In a small town (less than 10,000 people) that was not a suburb
(C) Inside a medium size city (10,000 to 100,000 people)
(D) In a suburb of a medium size city
(E) Inside a large city (100,000 or more people)
(F) In a suburb of a large city
(G) Don't know

12. Does your mother have a job outside your home?

(A) yes, full-time
(B) Yes, part-time
(C) No
(D)_____name of job, if employed

13. How good a student does your mother want you to be in school?

(A) One of the best students in my class
(B) Above the middle of the class
(C) In the middle of the class
(D) Just good enough to get by
(E) Don't know

14. How good a student does your father want you to be in school?

(A) One of the best students in my class
(B) Above the middle of the class
(C) In the middle of my class
(D) Just good enough to get by
(E) Don't know

15. How often do you and your parents talk about school work?

(A) Just about every day
(B) Once or twice a week
(C) Once or twice a month
(D) Never or hardly ever

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16. How much education does your father want you to have?

(A) Doesn't care if I finish high school or not
(B) Finish high school only
(C) Technical, nursing or business school after high school
(D) Some college but less than four years
(E) Graduate from a 4 year college
(F) Professional or graduate school
(G) Father is not at home
(H) Don't know

17. How much education does your mother want you to have?

(A) Doesn't care if I finish high school or not
(B) Finish high school only
(C) Technical, nursing or business school after high school
(D) Some college but less than 4 years
(E) Graduate from a 4 year college
(F) Professional or graduate school
(G) Mother is not at home
(H) Don't know

18. Did anyone at home read to you when you were small, before you started school?

(A) No
(B) Once in a while
(C) Many times but not regularly
(D) Many times and regularly
(E) Don't remember

The items listed below are thing your family may have. Mark A if your family has it. Mark B if your family does not have it.

19. Television set

(A) Yes
(B) No

20. Telephone

(A) Yes
(B) No

21. Record palyer, or stereo

(A) Yes
(B) No

22. Dictionary

(A) Yes
(B) No

23. Encyclopedia

(A) Yes
(B) No

24. Automobile

(A) Yes
(B) No

25. Daily newspaper

(A) yes
(B) No

26. How often do you go to a public library or bookmobile (not your school library)?

(A) Once a week or more

(B) 2 or 3 times a month
(C) Once a month or less
(D) Never

27. How many magazines do you and your family get regularly at home?

(A) None
(B) 1 or 2
(C) 3 or 4
(D) 5 or more

28. How many books are in your home?

(A) None or very few (0 - 9)
(B) a few (10 - 24)
(C) One bookcase full (25 - 99)
(D) Two bookcases full (100 - 249)
(E) Three or more bookcases full (250 or more)

29. Which one of the following best describes the program or curriculum you are enrolled in?

(A) General
(B) College preparatory
(C) Commercial or business
(D) Bocational
(E) Agriculture
(F) Industrial arts
(G) Other

30. Did you enter the program you indicated in question 29 of your own choice, or were you assigned to it?

(A) My choice
(B) Asigned
(C) Only one program in my school

31. About how many times have you changed schools since you started the first grade (not counting promotions from one school to another)?

(A) Never
(B) Once
(C) Twice
(D) Three Times
(E) Four times or more

32. When was the last time you changed school (not counting promotions from one school to another)?

(A) I have not changed schools
(B) Less than a year ago
(C) About one year ago
(D) About two years ago
(E) About three years ago
(F) About four years ago
(G) About five or more years ago

33. How far do you want to go in school?

(A) I do not want to finish high school
(B) I want to finish high school only
(C) I want to go to technical, nursing or business school after high school
(D) Some college training but less than 4 years
(E) I want to graduate from a 4 year college
(F) I want to do professional or graduate work after I finish college

34. Have you ever read a college catalog?

(A) Yes (B) No

35. Are you planning further education after high school?

(A) Definitely yes
(B) Probably yes
(C) Probably Not
(D) definitely not

36. On an average school day, how much time do you spend watching TV outside of school?

(A) None or almost none
(B) About ½ hour per day
(C) About 1 hour per day
(D) About 1½ hours per day
(E) About 2 hours a day
(F) About 3 hours per day
(G) 4 hours or more per day

37. If something happened and you had to quit school now, how would you feel?

(A) Very happy, I'd like to quit
(B) I wouldn't care one way or the other
(C) I would be disappointed
(D) I'd try hard to continue
(E) I would do almost anything to stay in school

38. How good a student do you want to be in school?

(A) One of the best in my class
(B) Above the middle of the class
(C) In the middle of my class
(D) Just good enough to get by
(E) I don't care

39. On an average school day, how much time do you spend studying outside of school?

(A) None or almost none
(B) About ½ hour per day
(C) About 1 hour per day
(D) About 1½ hours per day
(E) About 2 hours per day
(F) About 3 hours per day
(G) 4 or more hours per day

40. During the last school year, did you ever stay away from school just because you didn't want to come?

(A) No
(B) Yes 1-2 days
(C) Yes 3-6 days
(D) Yes 7-15 days
(E) Yes for 16 or more days

41. How bright do you think you are in comparison with the other students in your grade?

(A) Among the brightest
(B) Above average
(C) Average
(D) Below average
(E) Among the lowest

42. Do you feel that you can get to see a guidance counselor when you want to or need to?

(A) Yes
(B) No
(C) We have no guidance counselor

43. How many times did you talk with a guidance counselor last year?

(A) Never
(B) Once
(C) Two or three times
(D) Four or five times
(E) Six or more times
(F) We had no guidance counselor

44. Has your teacher or counselor encouraged you to take further training after high school?

(A) Yes, to go to college
(B) Yes, for technical or advanced job training
(C) Yes, for business or commercial training
(D) Yes, for other training
(E) No

46. Would you enroll in a vocational (job training) program if one that you were interested in was offered in your high school?

(A) I am already in a vocational program
(B) Yes, I would enroll in such a program
(C) No, I would not enroll in such a program

If you answered A or C on question 46, skip to question 50

47. Here is a list of the kinds of job training courses vocational students take in schools around the country. Mark the number of the program that comes closest to the one you would like.

00. Agriculture (on farm production)
01. Agriculture (off farm, and others related to farming needs)
02. Air conditioning
03. Airplane mechanics
04. Auto body mechanics
05. Automotive mechanics
06. Brick or stone masonry
07. Cabinet making
08. Carpentry
09; Commercial art
10. Cooperative office or business training
11. Cosmetology (beauty culture)
12. Diesel mechanics
13. Distributive education
14. Electricity
15. Food trades
16. Foundry
17. Industrial cooperative training
18. Machine shop
19. Maid training (domestic training)
20. Needle trades
21. Painting and decorating
22. Plumbing (pipe fitting)
23. Practical nursing (health)
24. Printing
25. Radio - TV repair
26. Sheet metal work
27. Welding
28. Other_____Name it

48. Would you like to be in a work-study program in which the school and local employer cooperate to give students on-the-job training?

(A) Yes (B) No.

49. Are you wanting training for the job you really want to work at when you finish high school?

(A) Yes
(B) No, I am not able to qualify for it
(C) No, the course is full and I have to take something else
(D) No, I will not try to take it
(E) There is no training for that jov in this school

50. How good a student do your teachers expect you to be?

(A) One of the best in my class
(B) Above the middle of my class
(C) In the middle of my class
(D) Just good enough to get by
(E) Don't know

51. People who accept their condition in life are happier than those who try to change things.

(A) Agree (B) Not sure (C) Disagree

52. Good luck is more important than hard work for success.

(A) Agree (B) Not sure (C) Disagree

53. Everytime I try to get ahead, something or somebody stops me.

(A) Agree (B) Not sure (C) Disagree

54. If a person is not successful in life, it is his own fault.

(A) Agree (B) Not sure (C) Disagree

55. Even with a good education, I'll have a hard time getting the right kind of job.

(A) Agree (B) Not sure (C) Disagree

56. I would make any sacrifice to get ahead in the world.

(A) Agree (B) Not sure (C) Disagree

57. If I could change, I would be someone different from myself.

(A) Agree (B) Not sure (C) Disagree

58. I sometimes feel that I just can't learn.

(A) Agree (B) Not sure (C) Disagree

59. I would do better in school work if teachers didn't go so fast.

(A) Agree (B) Not sure (C) Disagree

60. People like me don't have much of a chance to be successful.

(A) Agree (B) Not sure (C) Disagree

61. The tougher the job, the harder I work

(A) Agree (B) Not sure (C) Disagree

62. I am able to do many things well

(A) Agree (B) Not sure (C) Disagree

63. When you finish your education, what sort of job do you think you will have?

(A) Technical - such as draftsman, surveyor, medical or dental technician, etc.
(B) Official - such as manufacturer, officer in a large company, banker, government official, inspector, etc.
(C) Manager - such as sales manager, store manager, office manager, factory supervisor, etc.
(D) Proprietor or owner - such as the owner of a small business wholesaler, retailer, contractor, etc.
(E) Semi-skilled worker - such as factory machine operator, bus or cab driver, meat cutter, etc.
(F) Clerical worker - such as bankteller, bookkeeper, sales clerk, office clerk, mail carrier, messenger, etc.
(G) Service worker - such as barber, waiter, etc.
(H) Protective worker - such as policeman, detective, sheriff, fireman, etc.
(I) Salesman - such as real estate or insurance slaesman, factory represnetative, etc.
(J) Farm or ranch manager or owner
(K) Farm worker on one or more than one farm
(L) Workman or laborer - such as factory or mine worker, fisherman, filling station attendant, longshoreman, etc.
(M) Professional - such as accountant, artist, clergyman, dentist, doctor, engineer, lawyer librarian, scientist, teacher etc.
(N) Skilled worker or foreman - such as baker, carpenter, electrician, mechanic, plumber, tailor, foreman, etc.
(O) Don't know

Appendix F

CAREER ORIENTATION

S. A. D. #37

STUDENT'S EVALUATION

1. I have been made aware of continued change in the world of work.

   Very much_____

   Somewhat_____

   Not at all_____

2. I feel that I can accept change and will not object to making personal changes in my work and in my personal life.

   Yes_____

   No_____

   I don't know_____

3. I have become acquainted with the major fields of work and have developed a serious interest in one or more career areas.

   Yes_____

   No_____

4. I have had an opportunity to explore career possibilities in which I am interested, to make some comparisons, and to reach some decisions regarding my own career.

   Yes_____

   No_____

5. I feel that I will need further training or education.

   Yes_____

   No_____

6. If the answer to No. 5 is "Yes", I know where I can find the training.

   Yes_____

   No_____

7. I feel that I will be ready to enter my chosen career when I have finished high school.

   Yes_____

   No_____

8. Three methods of achieving further education would be:

   A._____

   B._____

   C._____

9. I have had an opportunity to discuss with a counselor or teacher my interests, abilities, weaknesses or strengths in relation to a career choice.

   Yes_____

   No_____

10. I believe I have improved my own ability to get along with others.

    Yes_____

    No_____

11. I have considered my abilities so I can present myself favorably when applying for a job.

    Yes_____

    No_____

12. I feel that my entire high school experience has made an important contribution toward my future career choice.

    Yes_____

    No_____

13. Those courses which have been most important to me are:

    _____

    _____

    _____

14. The course(s) in which I can see no relation to my future career is (are):

    _____

    _____

15. Is having a job more important than any other personal goal?

    Yes_____

    No_____

16. I have had work experience while in high school.

Yes_____

No_____

17. I have had the opportunity to visit with people who are actively engaged in the career field in which I am interested.

Yes_____

No_____

18. I have had the opportunity to attend a Career Program.

Yes_____

No_____

Yes, but I did not attend_____

19. In my opinion my school provides adequate assistance concerning possible career choices.

Yes_____

No_____